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Roads, Trains and Ports: Integrating North American Transport

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Mexico's role in the North American economy is changing from being an assembly platform to an advanced manufacturing hub. Historically, Mexico enjoyed three advantages in the global economy: geographic proximity to the world's largest market, a cheap exchange rate, and low cost labour. These conditions helped promote the creation of the maquiladora industry — the essence of a low cost/low-value-added assembly platform that helped create much needed jobs in Mexico. This model has now run its course.

Low cost labour is no longer a key comparative advantage. Many labour intensive assembly operations have moved to Southeast Asia and China. Sound economic management over the past decade has resulted in a stable peso, minimizing the advantage of a cheap peso. Thus, Mexico's competitive advantage now rests primarily on its strategic location in North America and on its network of free trade agreements.

Mexico's choice today is to take advantage of its strategic geographic location to become an advanced manufacturing platform or to continue down the road of a low wage, low-value-added assembly economy. An efficient and secure transportation system will act as a catalyst to help Mexico shift toward advanced manufacturing.

Global manufacturers can still find low cost labour in Mexico. Keeping these low cost jobs in Mexico would spur economic growth in the country's poorest communities while also creating valuable manufacturing and assembly synergies in North America. Mexico's "March to the South" program that encourages low cost assembly operations to migrate to the poorer southern half of the country is good public policy and the entire NAFTA region would benefit from its successful implementation. However, the almost complete lack of transportation linkages between southern Mexico and the rest of North America effectively precludes such low cost regional production strategies.

Since September 11, 2001, it has become clear that security is as important as efficiency and cost when it comes to supply chain management. Mexico has the opportunity to use the creation of a secure transportation system as a comparative advantage in the global search for investment. September 11 and the 2002 West Coast port strike convinced several large corporations to reevaluate the risks of lengthy trans-Pacific supply chains. Mexico has a limited window of opportunity to capitalize on this situation and

must move aggressively to adopt security programs such as the Customs Trade Partnership Against Terrorism (CT-PAT) and the Container Security Initiative (CSI).

There are many of the same logistical challenges facing the private sector in Mexico and I would suggest general policy recommendations to create a more competitive Mexican transportation system. The issues and recommendations are the product of over 35 field interviews with shippers, carriers and governmental officials in several Mexican and US cities.

Privatizations/concessions: Privatizing some of its transportation assets has enhanced Mexico's competitiveness in recent years. However, structural deficiencies remain — particularly in the regulatory framework, poor concession design and oversight, and the lack of a coherent strategy that defines public and private sector roles clearly. Instead of structuring concessions to provide the best service at the lowest price for the end user, there is a disturbing trend to increase short-term receipts for the government or the concessionaire. As a result, transportation costs are comparatively higher in Mexico.

Regulatory environment: The Secretariat of Communications and Transport (SCT) serves as owner, operator and regulator of much of Mexico's transportation sector. While its mandate is to improve the country's transportation system, the central challenge is the confusing mix of roles the SCT plays. In many cases, the SCT is a single line ministry responsible for policy formulation, promotion, actual operations and investment, as well as monitoring and regulation. The resulting confusion of roles has led to the perception of high risk for private entrants into the industry, ineffective regulation, and poor sector performance.

Intermodal transport: The relative success of railway privatizations and the close integration of the North American automotive sector have generated significant new interest in intermodal transportation in Mexico. The problem is that while international trade is highly containerized, Mexico is not. Mexico must move more aggressively to improve its intermodal capabilities. Coordination between the different actors in the intermodal chain must be improved, facilities such as inland ports built, legal documentation streamlined, true intermodal operating companies created and tariffs lowered. Rail and road access to port facilities and distribution centres still need improvement. Excessive bureaucracy, poor coordination combined with a lack of investment in container handling equipment and infrastructure are inhibiting competitiveness.

Individual transportation modes: Increasingly, multinational companies throughout North America depend on the integration of various modes of transport. In this regard, like the pieces of a puzzle, Mexico must increase the interoperability of its rail, air cargo, marine and highway transportation modes. A brief analysis of each mode is helpful.

Ports and maritime transport: Mexico's ports are much better today than a few years ago. The creation of the Integrated Port Authorities (APIs) has helped attract investment and improve service. Ports are still owned by the government, but are now structured and operated like a business. Private concessionaires are now working hand-in-hand with the APIs to build world-class infrastructure. Nevertheless, scarce investment dollars in the ports are underutilized due to systemic problems in the nation's transportation system.

Impressive gains in efficiencies achieved in Mexican ports in recent years are subsequently lost during the transfer of the goods to rail or truck due to repeated lengthy and uncoordinated administrative and police controls. Further, the lack of multimodal infrastructure such as inland ports seriously reduces container through-put and increases dwell time.

Recently, Mexico, the US and Canada signed a short sea shipping (SSS) agreement designed to improve maritime linkages and promote regional efficiencies in North America. This agreement will help lower current dependence on trucking in the NAFTA region and lower the costs of many bulk commodities such as petrochemicals used in the manufacturing process. However, in order to achieve these goals, more investment dollars must be found, the regulatory environment improved and Mexican ports incorporated into contemporary US security programs.

The NAFTA countries should act swiftly to develop a truly North American maritime system. Most importantly, Mexico should substantially increase infrastructure funding and reform its legal framework with an eye on creating an efficient and secure system of large hub and small feeder ports.

Rail: Beginning in 1996, Mexico dismantled its former rail monopoly by granting long-term concessions to large US and Mexican interests. As a result, three major railroads and a series of short lines have been created. TFM, Ferromex and Ferrosur, Mexico's principal carriers, have made impressive gains in recent

years. Infrastructure investments are up substantially and service has improved dramatically. Rail is gradually gaining market share from the trucking industry. However, the Mexican rail sector has not realized its full potential.

Legal disputes are largely responsible. Trackage right disputes between the main carriers inhibit cooperation, increase costs for shippers and stem the efficient use of the nationwide rail system. Most shippers continue to use trucks to move their goods. Greater regulatory vigilance and legislative changes are required to solve the trackage right conflict.

North America would be well served by further linking its rail infrastructure and systems. Rail has inherent efficiency, environmental, investment and security benefits that should be harnessed. As a matter of public policy, Mexico should implement policies that channel cargo to the rail system. The logic is simple: the private sector invests in the construction and maintenance of the rail system while scarce public funds are used to construct and maintain highways. Thus, less money spent on highways means more resources for Mexico's other pressing needs.

Finally, rail has intrinsic security benefits not found in the trucking industry. First, it is more difficult to violate the integrity of large unit trains than trucks. Second, one unit train can carry the equivalent of approximately 250 trucks. Consequently, tracing and tracking technologies are more effective. Third, border security focuses on cargo as well as on people. Trains use fewer people than trucks to move the same amount of goods. Rail puts less pressure on border inspection infrastructure and personnel while improving interdiction probabilities. In today's security conscious environment, efficient rail linkages will ensure that North American companies continue to reap the regional manufacturing efficiencies envisioned under NAFTA.

Highways: About 88 percent of Mexico's domestic freight and approximately 61 percent of international trade is moved via truck. Mexico's dependence on trucks jumps considerably when petroleum exports are eliminated. In general, Mexico and the NAFTA region must diversify transportation modes. Nevertheless, trucking will continue to be the workhorse of NAFTA trade. Therefore, action must be taken to improve this sector.

In order to improve Mexico's trucking system, two fundamental problems must be overcome: construction of new roads and the elimination of key structural barriers to competitiveness. The poor condition of Mexico's roads raises manufacturing costs and limits industrial growth to the few locations with decent highway access. The system is in desperate need of maintenance and new construction. Making the situation worse is the fact that Mexican truckers tend to overburden their vehicles, a practice that contributes to the rapid dilapidation of the nation's highways. A vicious cycle ensues. Poor highways increase wear and tear on equipment and raise vehicle maintenance costs.

Mexico's trucking sector is plagued by high operating costs that create problems for shippers and carriers alike. The factors contribute to elevated costs include the excessive costs of diesel fuel and toll roads as well as high interest rates for the purchase of new equipment. Further, high indices of theft increase insurance costs and necessitate paid escorts that negatively impact on manufacturers' bottom lines. Without a doubt, North American supply chains would be improved through the full implementation of NAFTA's cross-border trucking provisions.

Air cargo: Domestic air transportation is probably the most underutilized of all forms of transportation in Mexico. Domestic air freight accounts for only 30 percent of all freight shipped by air in Mexico. Obviously, the system is not being utilized to its full potential, thus hindering the development of time-sensitive industries in Mexico. Although the performance of major airports has improved significantly in terms of turnover time and most other indicators, the gains achieved through the airport reform are often undone by excessive fees charged in air cargo terminals along with long waiting times for cargo clearance, especially due to lengthy and uncoordinated administrative and police controls.

Advanced manufacturing in Mexico requires a more competitive business environment. Among Mexico's overarching transportation related challenges are competitiveness, deregulation and decentralization. If Mexican enterprises are to compete effectively and profit from free trade they will increasingly require higher quality transportation services and infrastructure. Similarly, the creation and maintenance of high paying manufacturing jobs in North America depends on the development of a world-class transportation system in Mexico. Working together to develop a secure and agile transportation system in Mexico is a practical step toward improving NAFTA's overall competitiveness.

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